



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/581,150

05/31/2006

Marco Ronconi

242/9-2246

2031

28147 7590 07/24/2008

WILLIAM J. SAPONE  
COLEMAN SUDOL SAPONE P.C.  
714 COLORADO AVENUE  
BRIDGE PORT, CT 06605

EXAMINER

CHUKWURAH, NATHANIEL C

ART UNIT

PAPER NUMBER

3721

MAIL DATE

DELIVERY MODE

07/24/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/581,150	<b>Applicant(s)</b> RONCONI, MARCO	
	<b>Examiner</b> NATHANIEL C. CHUKWURAH	<b>Art Unit</b> 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/5/2008 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 16-18 and 20-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moraht et al. (US 4,915,013) in view of Ramspeck (US3,547,003).

With regard to claim 16, the patent to Moraht et al. discloses a pneumatic fixing machine (driving tool) comprising: a piston mean (12) slidably located inside a cylinder (11); first valve means (37) movable between two extreme positions, an opening position, such that the first valve means are in fluidic communication with an inlet portion (32) of the cylinder (11) for receiving a pressurized fluid and a closing position (Fig. 1) where the first valve means are in communication with an external outlet; second valve means (61) movable in response to operation of a trigger (26), the second valve means movable between an occlusion position (Fig.

Art Unit: 3721

1) for fluidly connecting at least a first duct (58) and a base portion (40) of the first valve means (37) for feeding the pressurized fluid therethrough, and, a passage position (Fig. 2) for connecting to an external outlet; third valve means (38) movable between a position of obstruction, to cut off flow between the first duct (58) and the first valve means (37), and, a crossing position (Fig. 2), which opens a flow connection between the duct (58) and the first valve means (37); fourth valve means (56 valve piston) movable in response to operation of the trigger (26), the fourth valve means movable between a block position (Fig. 2), where flow is obstructed between the cylinder (11) and the third valve means (38), and, a transit position (Fig. 4) such that flow is permitted between the cylinder (11) and the third valve means (38); wherein in a first activation condition, the trigger (26) is partially pressed, positioning the second valve means (61) in the passage position, to allow the pressurized fluid to push the first valve means (37) into the opening position (Fig. 2), actuating the piston mean (12); and wherein in a second activation condition, the trigger (26) is further and completely pressed (Fig. 4), moving the fourth valve means (56) into the transit position, to allow the pressurized fluid coming from the cylinder (11) to move the third valve means (38) into the occlusion position, causing the return of the first valve means (37) to the closing position and the consequent return of the piston mean (12) to the initial position. Moraht et al.'s fourth valve (56) to a degree does not show lengthened shape. Ramspeck teaches a valve (132) lengthened and slidably housed inside a seat, complementary shaped and in fluid communication with the cylinder (18) through a duct (108b).

Therefore, it would have been obvious to one skilled in the art to incorporate the teaching of Ramspeck into the tool of Moraht et al. by providing the lengthened and slidably valve in order to move from first position to a second position to shut off the fluid supply when the

Art Unit: 3721

trigger is released. Further, although Moraht et al. lack elastic means for exerting a biasing force on the fourth valve means, however, Moraht et al. teaches biasing compression spring (62) for exerting a biasing force on valve (61). Therefore, it would have been obvious to one skilled in the art to provide the Moraht et al.'s fourth valve with elastic biasing means in order return the valve in its seating position. Further, applying known technique to a known device ready for improvement would yield predictable result, for example, adding a spring to bias the valve (132).

With regard to claim 18, the modified fourth valve means (132 Ramspeck) includes a hollowed portion for receiving a shaped free end of the trigger, see Figure 7 of Ramspeck.

With regard to claim 20, although Moraht et al. lack elastic means for exerting a biasing force on the fourth valve means, however, Moraht et al. teaches biasing compression spring (62) for exerting a biasing force on valve (61). Therefore, it would have been obvious to one skilled in the art to provide the Moraht et al.'s fourth valve with elastic biasing means in order return the valve in its seating position.

With regard to claim 21, the third valve means (38) of Moraht et al. comprises a shaped stem as shown in Figure 4, having a first end portion (51 Fig. 1) slidably housed in a second seat (55 bore) and a second end portion (53) slidably housed in a first room (55 bore), the first end portion (52 effective area) being shaped to close the exit of the bore (50) inside the second seat (55) when the third valve means are in the closed position.

With regard to claim 22, the second end portion (53) has an equivalent transversal section greater than an equivalent transversal section of the first end portion (51).

With regard to claims 23 and 24, the tool of Moraht et al. further comprises a third duct (102) for fluid communication between the first seat as shown in Figure 4 and the first room (55).

With regard to claims 25 and 26, the fourth valve means (56) has a hollowed portion housing the valve for fluid communication between the duct (58) and duct (58a) when the fourth valve means is in the transit position (Fig. 4).

With regard to claim 27, the base portion (40) of the first valve means (37) is slidably housed in a second room (39) which is in fluid communication with the second seat (valve housing).

With regard to claim 28, the pneumatic machine according to claim 16 wherein the first valve means (37) has a closing portion (37a) shaped to cut off pressurized fluid flow when the first valve means are in the closing condition as shown in Figure 4, the closing portion (37a) having a smaller equivalent transversal section than an equivalent transversal section of the base portion (40).

With regard to claim 29, (New) The pneumatic machine according to claim 21 wherein the first valve means (37) comprise a lengthened and shaped element as shown in Figure 4, slidably housed inside a seat (30 bore) which has a first opening (22) for fluid communication with a third room (63a) that it is in fluid communication with the feed of pressurized fluid, a second opening (chamber 65) intermediately located and connected to the duct (58) and an opening (not shown) for connecting with the external outlet.

With regard to claim 30, valve means (61) has an external portion (60), fit to match the trigger (26), and a lock portion (end portion), opposite to the external portion and fit for closing the opening (63a) of the seat (63) when the valve means (61) is in the closed position.

With regard to claim 31, although the geometric axis of the second valve means and of the modified fourth valve means of Moraht et al. to a degree do not show mutually perpendicular arrangement; arranging both valves perpendicular relative each other provide no unexpected results, it involves only routine skill in the art, as one skilled in art would arrange any part in any desired orientation. However, it would have been obvious to one skilled in the art to modify the valve parts of Moraht et al. arranged perpendicular relative each other since applicant has not stated that such arrangement improve the valve performance or has advantage.

With regard to claim 32, Moraht et al. show a geometric axis of valve means (37) and of valve means (38) being nearly coincident and nearly parallel to an axis of the trigger valve means (61).

7. Claims 16-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howard Ramspeck (US 3,547,003).

With regard to claim 16, Howard Ramspeck reference discloses a pneumatic fixing machine (10) comprising: a piston means (26), first valve means (60) in fluid communication with the tool cylinder (18) and exhaust port (19), a second valve means (77) operated by the trigger means (98), and movable between open position and closed position to connect pressurized fluid through at least first duct (44 Fig. 3), a fourth valve means (132) operated by the trigger (98) movable between open position and closed position to cut off supply of

Art Unit: 3721

pressurized fluid to the cylinder (18); the machine function to operate the piston as claimed as described on column 4, lines 67-75; column 5, lines 1-53.

Ramspeck's reference discloses the claimed invention except that valve means (60) is one piece integral valve unlike applicant's two piece of the same valve means which operates to supply pressurized fluid to the cylinder and exhaust port. However, it would have been obvious to one skilled in the art to make one piece valve into two pieces since mere duplication of essential working parts of a device involves only routine skill in the art.

With regard to claim 17, Ramspeck's valve means (132) further comprises a piston valve (134) slidable inside a chamber (130) considered to be a first seat and in flow connection to the cylinder (18) and at least a second duct (108, 152).

With regard to claim 18, Ramspeck's reference discloses valve means (132) considered to be the fourth valve means comprising a least an engaging element supporting the trigger means which meets the limitation of "hollow".

With regard to claim 19, Ramspeck's reference discloses elastic means (142) for exerting an elastic strength on the valve (132) when not actuated by the trigger.

With regard to claim 20, the elastic means of Ramspeck's reference lacks compression helical spring, however biasing valve means by helical spring is old and well known in the art and would have been obvious to one skilled in the art to have provided the elastic means of Ramspeck's reference as a helical spring to effectively bias and return the valve to the valve's seat. (see US 5,865,360 for example).

With regard to claim 21, Ramspeck's reference discloses valve means (60) comprising a stem (68) slidable within valve seat (62) and passageway (74), the first end (70) of the valve



Art Unit: 3721

means (60) being fitted to close off first duct (44) inside a seat adjacent passageway (74) which satisfies the limitation.

With regard to claim 22, Ramspeck's valve means (60) includes a portion (70) of transversal section as shown in Figure 3 which is greater than the second end of the valve means (60), the features of the valve means, as set for the above satisfy the limitation.

With regard to claims 23 and 24, the machine of Ramspeck further comprises duct (port 152) for flow connection between the chamber (130) and the inside cylinder (78), which satisfy the claimed limitation.

With regard to claims 25 and 26, Ramspeck's valve means (132) comprises a hollow (130) through which port (140, 146) are connected in fluid communication when the valve is biased.

With regard to claim 27, the piston of the valve means (60) slidably contained inside valve cylinder (78) and in fluid communication with the passage (74), which satisfy the claimed limitation.

With regard to claim 28, the valve means (60) comprises a closing portion (section 70) having a smaller transversal section than the portion (72) of the valve means (60).

With regard to claim 29, Ramspeck's reference discloses a trigger valve (77) including elongated portion (84) sliding in chamber (93) provided with (passage (102) and in fluid communication with passage (106) connected to port (108) and exhaust port (19), satisfying the claimed limitation.

With regard to claim 30, a trigger valve (77) of Ramspeck comprises at external portion (circular end portion Fig. 3) fit to match the trigger means (98) and a lock portion (distal end

Art Unit: 3721

portion Fig. 3), opposite the external portion as shown in Figure 3, fit for close opening (94 passage) of the chamber (93) in the blocking position of the valve means (60).

With regard to claim 31, arranging the fluid cut-off valve and the trigger valve perpendicular relative to each other provide no unexpected results, it involves only routine skill in the art. However, it would have been obvious to one skilled in the art to provide the valve parts in a desired arrangement, for example, arranging the fluid cut-off valve and the trigger valve perpendicular relative each since applicant does not state that such arrangement improve the valve performance.

With regard to claim 32, Ramspeck's valve means (60) and valve (77) are parallel to one another, which satisfy the claimed limitation.

### ***Response to Arguments***

8. Applicant's arguments filed 5/5/2008 have been fully considered but they are not persuasive.

Applicant is arguing on page 8, that there no tactile signal which alerts the operator of the passage from single shot mode to the continuous shot mode. Applicant's argument is not persuasive, although applicant's argument is more specific than what is claimed, no tactile signal was claimed. Further, Moraht et al. implicitly includes a signal indicating that the tool is in a continuous mode as described column 6, lines 25-30.

Applicant is arguing on page 9, that claims 16, 18, 20 and 31 are not rendered obvious over Mohaht et al., there is nothing within Mohaht that teaches or suggests the particular

arrangement of components as provided by the present invention, and any proposed modifications to achieve the present invention comprise a clear hindsight reconstruction.

Applicant's argument is not persuasive because the modified Mohaht et al.'s tool operates under same principle as the present invention, and the arrangement of parts as argued by applicant is considered routine in the art, since applying a known technique to a known device ready for improvement would yield predictable result.

Further, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant is arguing on page 9, that Ramspeck has only three valves. Ramspeck fails to teach or suggest to one skilled in the art the use of a fourth valve, and also fails to teach or suggest the provision of elastic means associated with this fourth valve to provide a clear tactile distinction when switching modes. It is the Examiner's position that Ramspeck's tool operates under same principle as the present invention, for example single shot and continuous shot with valve arrangement as shown in the Figures.

Valve means (60) is one piece integral valve unlike applicant's two pieces of the same valve means which operates to supply pressurized fluid to the cylinder and exhaust port. One

Art Unit: 3721

skilled in the art would know make one piece valve into two pieces to reduce parts since mere duplication of essential working parts of a device involves only routine skill in the art.

Ramspeck's tool teaches valve and biasing spring, and one skilled in the art would know to apply known technique to a known device ready for improvement to yield predictable result, for example, adding a spring to bias the valve (132). Ramspeck's tool further teaches a signal pressure indicating a change to repetitive motion (col. 6, line 73), which satisfy the claimed limitation of "tactile signal". Applicant has overcome the rejection under the combinations of the references.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathaniel C. Chukwurah whose telephone number is (571) 272-4457. The examiner can normally be reached on M-F 6:00AM-2:30PM.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3721

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nathaniel C. Chukwurah/  
Examiner, Art Unit 3721

/Rinaldi I Rada/  
Supervisory Patent Examiner, Art Unit 3721  
7/16/2008.